IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A neutron detector comprising scintillating material

$Cs_{(2-z)}Rb_zLiLn_{(1-x)}X_6 : xCe^{3+}$, where X is either Br or [[l]] $\underline{I}$, Ln is Y or Gd or Lu or Sc or La,

where z is greater or equal to 0 and less or equal to 2, and x is above 0.0005.

Claim 2 (Previously Presented): The neutron detector according to claim 1, wherein x

is above 0.005.

Claim 3 (Previously Presented): The neutron detector according to claim 1, wherein x

is less than 0.3.

Claim 4 (Previously Presented): The neutron detector according to claim 1, wherein x

is less than 0.15.

Claim 5 (Previously Presented): The neutron detector according to claim 1, wherein it

is in the form of a monocrystal.

Claim 6 (Previously Presented): The neutron detector according to claim 5, wherein

the volume of the monocrystal is at least 10 mm^3.

Claim 7 (Previously Presented): The neutron detector according to claim 1, wherein it

is in the form of a powder.

Claim 8 (Previously Presented): The neutron detector according to claim 1, wherein it is packed, sintered, or mixed with a binder.

Claim 9 (Previously Presented): The neutron detector according to claim 1, wherein its formula is $Cs_2LiYX_6:xCe^{3+}$.

Claim 10 (Previously Presented): The neutron detector according to claim 1, wherein its formula is $Rb_2LiYX_6:xCe^{3+}$.

Claim 11 (Currently Amended): A method of neutron detection comprising detecting neutrons using a material of formula $Cs_{(2-z)}Rb_zLiLn_{(1-x)}X_6:xCe^{3+}$, where X is either Br or [[I]] I, Ln is Y or Gd or Lu or Sc or La, where z is greater or equal to 0 and less or equal to 2, and x is above 0.0005.

Claim 12 (Previously Presented): The method according to claim 11, wherein x is above 0.005.

Claim 13 (Previously Presented): The method according to claim 11, wherein x is less than 0.3.

Claim 14 (Previously Presented): The method according to claim 13, wherein x is less than 0.15.

Claim 15 (Previously Presented): The method according to claim 11, wherein the material is in the form of a monocrystal.

Claim 16 (Previously Presented): The method according to claim 15, wherein the volume of the monocrystal is at least 10 mm^3.

Claim 17 (Previously Presented): The method according to claim 11, wherein the material is in the form of a powder.

Claim 18 (Previously Presented): The method according to claim 17, wherein the material is packed, sintered, or mixed with a binder.

Claim 19 (Previously Presented): The method according to claim 11, wherein the material formula is $Cs_2LiYX_6:xCe^{3+}$.

Claim 20 (Previously Presented): The method according to claim 11, wherein the material formula is $Rb_2LiYX_6:xCe^{3+}$.

Claim 21 (Currently Amended): A material of the formula ~~$Rb_2LiYX_6:xCe^{3+}$~~ $\underline{Rb_2LiLnX_6:xCe^{3+}}$ where X is either Br or [[I]] $\underline{I}$, Ln is Y or Gd or Lu or Sc or La, and x is above 0.0005.

Claim 22 (Currently Amended): A material of the formula ~~$Cs_{(2-z)}Rb_zLiLn_{(1-x)}I_6:xCe^{3+}$~~ $\underline{Cs_{(2-z)}Rb_zLiLn_{(1-x)}I_6:xCe^{3+}}$, where Ln is Y or Gd or Lu or Sc or La, where z is greater or equal to 0 and less or equal to 2, and x is above 0.0005.

Claim 23 (Previously Presented): The material according to claim 21, where x is above 0.005.

Claim 24 (Previously Presented): The material according to claim 21, wherein x is less than 0.3.

Claim 25 (Previously Presented): The material according to claim 24, wherein x is less than 0.15.

Claim 26 (Previously Presented): The material according to claim 21, wherein it is in the form of a monocrystal.

Claim 27 (Previously Presented): The material according to claim 26, wherein the volume of the monocrystal is at least 10 mm^3.

Claim 28 (Previously Presented): The material according to claim 21, wherein it is in the form of a powder.

Claim 29 (Previously Presented): The material according to claim 28, wherein it is packed, sintered, or mixed with a binder.

Claim 30 (New): The material according to claim 21, where Ln is Y.